Biometrics: Why We Need Them, Why We Are Afraid of Them

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How did we get involved with biometrics?

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Security Authentication Choices

- Passwords
- Tokens
- SmartCards
- Biometrics

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Authentication Technology Weaknesses

| | Password/PIN | Token | SmartCard | Biometrics |
|-------------------|--------------|-------|-----------|------------|
| Difficulty of Use | Yes | No | No | ? |
| Lost | Yes | Yes | Yes | No |
| Stolen | Yes | Yes | Yes | No |
| Forgotten | Yes | Yes | Yes | No |
| Forged | Yes | ? | Yes | ? |
| Damaged | No | Yes | Yes | Yes |
| Loaned to others | Yes | Yes | Yes | No |

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Why did we suggest a biometric middleware?

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Need for Middleware

- Support of multiple biometric API's
- Management of biometric templates
- Normalization of scores
- Technology/device selection
- Management of multiple devices
- Implementation of layered authentication using multiple biometrics
- · Support for other authentication technologies
- · Support for identification technologies

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Why Are We Afraid of Biometrics?

- Electronic Identity Theft
- Lack of legislation on storage of biometrics
- Lack of legislation on transmission of biometrics
- Lack of community preparation and discussion

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